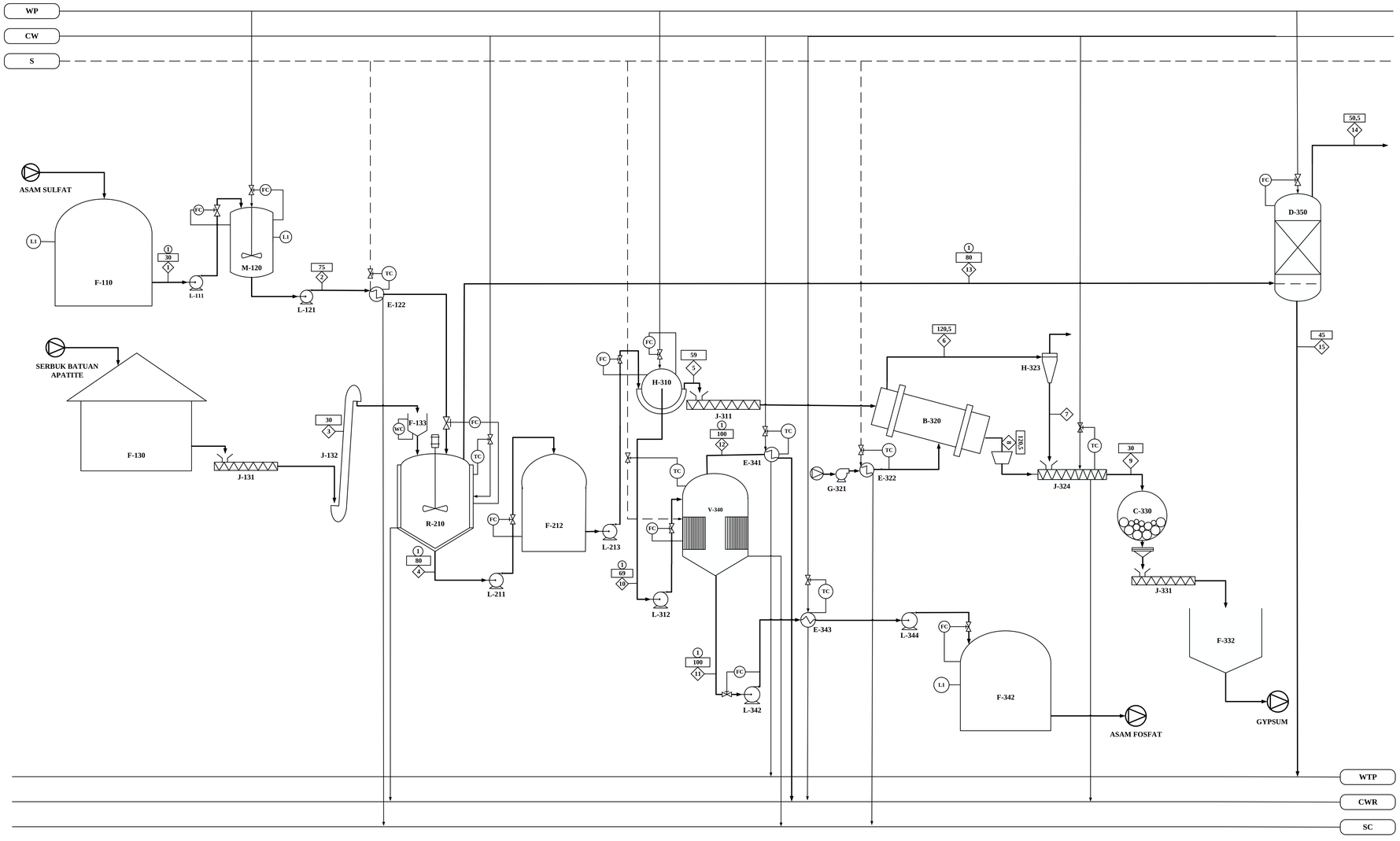
PABRIK ASAM FOSFAT DARI ASAM SULFAT DAN BATUAN APATITE DENGAN PROSES BASAH



	Temperatur : °C
	Tekanan : atm
	Aliran Massa : kg/jam
CW	Cooling Water
WP	Water Process
S	Steam
CWR	Cooling Water Return
WTP	Waste Water Treatment Process
SC	Steam Condensat

No.	KODE	NAMA ALAT	
31	D-350	SCRUBBER	
30	F-342	TANGKI ASAM FOSFAT	
29	L-344	POMPA	
28	E-343	COOLER	
27	L-342	POMPA	
26	E-341	KONDENSOR	
25	V-340	EVAPORATOR	
24	F-332	SILO GYPSUM	
23	J-331	SCREW CONVEYOR	
22	C-330	BALL MILL	
21	J-324	COOLING SCREW CONVEYOR	
20	H-323	CYCLONE	
19	E-322	HEATER	
18	G-321	BLOWER	
17	B-320	ROTARY DRYER	
16	L-312	POMPA	
15	J-311	SCREW CONVEYOR	
14	H-310	ROTARY DRUM VACUM FILTER	
13	L-213	POMPA	
12	F-212	TANGKI SLURRY	
11	L-211	POMPA	
10	R-210	REAKTOR	
9	F-133	SILO	
8	J-132	BUCKET ELEVATOR	
7	J-131	SCREW CONVEYOR	
6	F-130	GUDANG PENYIMPANAN BATUAN APATITE	
5	E-122	HEATER	
4	L-121	POMPA	
3	M-120	TANGKI PENGENCER ASAM SULFAT	
2	L-111	POMPA	
1	F-110	TANGKI PENYIMPANAN ASAM SULFAT	

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FLOWSHEET PABRIK ASAM FOSFAT DARI ASAM SULFAT
DAN BATUAN APATITE DENGAN PROSES BASAH

PROGRAM STUDI TEKNIK KIMIA
FAKULTAS TEKNIK DAN SAINS
UNIVERSITAS PEMBANGUNAN NASIONAL
"VETERAN" JAWA TIMUR
2024

Nomor / Komponen	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
$Ca_3(PO_4)_2$			20967,539	1048,3770	1048,3770	10,4838	10,3789	1037,8932	1048,2721						
H_2SO_4	25514,77	25514,77		1275,7384	25,5148			25,5148	25,5148	1250,2236	1250,2236				
H_2O	520,710	8717,92	1280,598	1716,4941	34,3299	10,2641	0,1026	24,0657	24,1684	1682,1642	927,8064	754,3578	20136,677		20136,677
CaF_2			1642,873	82,1436	82,1436	0,8214	0,8132	81,3222	82,1354						
$CaCO_3$			3638,063	181,9031	181,9031	1,8190	1,8008	180,0841	181,8849						
$CaSO_4.2H_2O$				42541,9689	42541,9689	425,4197	421,1655	42116,5493	42537,7147						
CO_2				1520,7102									1520,710	1520,7102	
HF				800,3738									800,374	8,0037	792,370
H_3PO_4				12594,0510	251,8810			251,8810	251,8810	12342,1700	12342,1700				
H_2O (Proses)	8197,211				48340,2724										
Impuritis			4485,880	4485,8797	4485,8797	44,8588	44,4102	4441,0209	4485,4311						
Total	**34232,69**	**34232,69**	**32014,952**	**66247,6400**	**96992,270**	**493,6669**	**478,6713**	**48158,331**	**48637,003**	**15274,558**	**14520,200**	**754,3578**	**22457,762**	**1528,7140**	**20929,048**